

## PROJECT DESCRIPTION

## I. GENERAL

This project involves modifying the existing southbound exclusive permissive left turn phase to an exclusive left turn phase with flashing red arrow. MD 97 (Georgia Ave) is assumed to run in a north-south direction.

## II. INTERSECTION OPERATION

- The intersection of MD 97 and Arcola Avenue will operate in a NEMA FIVE PHASE FULL TRAFFIC SEMI-TRAFFIC ACTUATED mode with an exclusive flashing Red arrow phase for southbound MD 97.
- During normal operation the Firehouse Emergency Traffic Control Signal shall allow continuous movement along the westbound direction of Arcola Avenue. During the pre-emption phase, the Emergency Signal shall display "RED" for the westbound approach of Arcola Avenue and "8 inch YELLOW" for the Firestation Driveway approach. Additionally, the Traffic Control Signal for MD 97 (Georgia Avenue) and Arcola Avenue shall display "Green" for the westbound approach of Arcola Avenue and "RED" for all other approaches. Lastly, the fiber optic sign for the northbound approach of MD 97 (Georgia Avenue) shall indicate "No Right Turn".
- The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet located at the intersection of MD 97 (Georgia Avenue) and Arcola Avenue shall be utilized.

## III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- Contact Mr. Bob Gonzales at (240) 777-8761 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

## EQUIPMENT LIST

- A. EQUIPMENT TO BE SUPPLIED BY STATE HIGHWAY ADMINISTRATION AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
9001	R10-12(4) "LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP 36" x 42" with mast arm mounting hardware.	10.5 S.F.

- B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of Traffic.	1 E.A.
8061	5-conductor electrical cable (No. 14 A.W.G.).	375 L.F.
8056	12" , one-way, three-section signal head section with mast arm mounting hardware.	6 E.A.
8047	Install overhead sign	10.5 S.F.

## EQUIPMENT LIST (CONT.)

- C. EQUIPMENT TO BE RETURNED TO SHA

THERE IS NO EQUIPMENT BEING REMOVED AND RETURNED FOR THIS PROJECT.

The contact persons for District #3 (Montgomery County) are as follows:

Mr. Lee Starkloff  
Assistant District Engineer - Traffic  
Phone: (301) 513-7318

Mr. Wayne Mowdy  
Assistant District Engineer - Maintenance  
Phone: (301) 513-7304

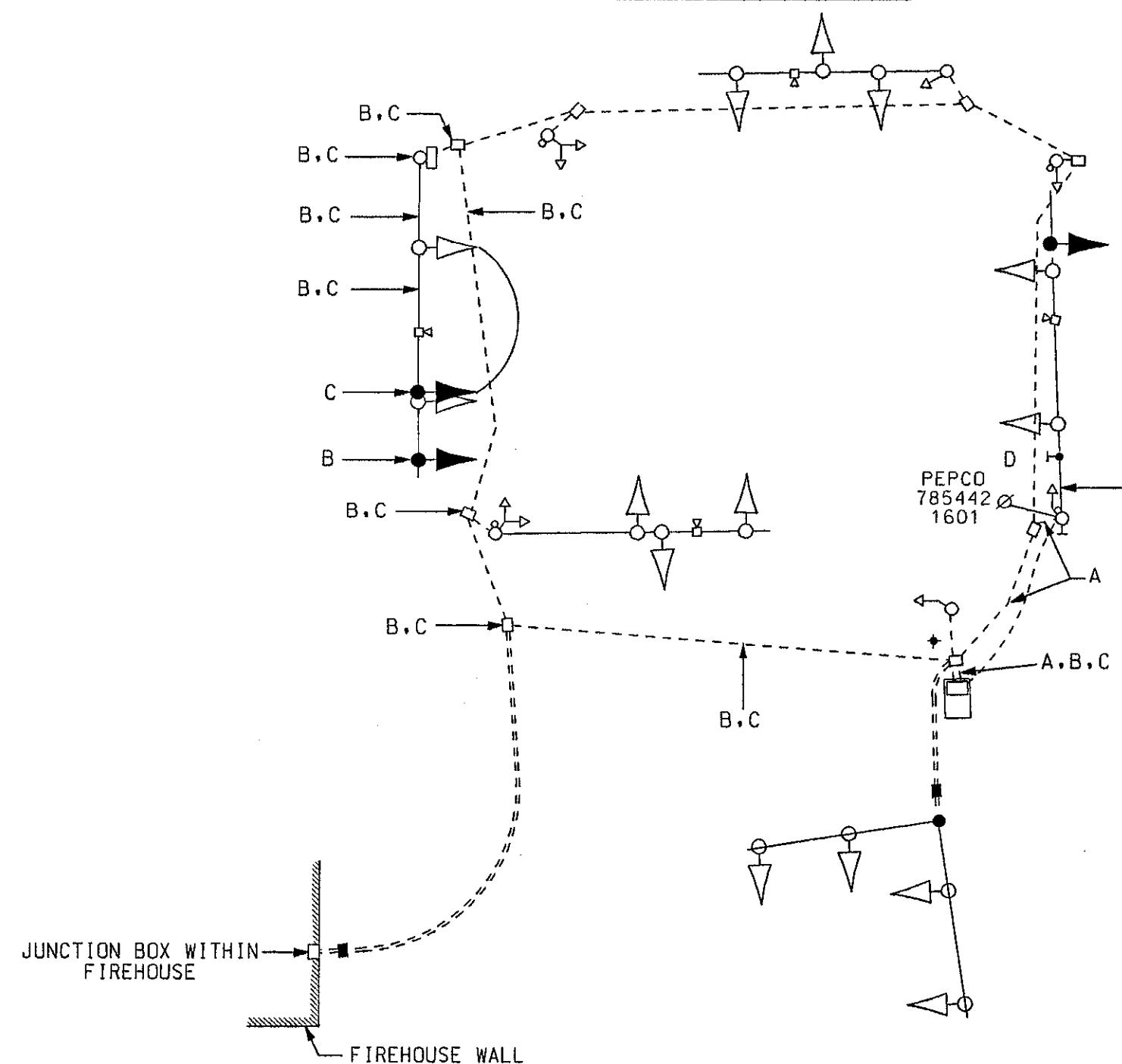
Mr. Augie Rebish  
District Engineer - Utility  
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

## PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17,18 19,20	21,22 23,24
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (Y)	(R) (Y) (Y)	(MR) (Y) (MG)	(MR) (Y) (MG)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)
Phase 2 & 5	R	R	FL/R	FL/R	FL/R	FL/R	G	G	R	R	R	FL/Y	FL/Y	R	R	G	DW	DW
5 Change	R	R	FL/R	FL/R	FL/R	FL/R	G	G	R	R	R	FL/Y	FL/Y	R	R	Y	DW	DW
Phase 2 & 6	G	G	FL/R	FL/R	FL/R	FL/R	G	G	R	R	R	FL/Y	FL/Y	R	R	R	W	DW
2 & 6 Change	Y	Y	FL/R	FL/R	FL/R	FL/R	Y	Y	R	R	R	FL/Y	FL/Y	R	R	R	FL/DW	DW
Phase 4 & 8	R	R	FL/R	FL/R	FL/R	FL/R	R	R	G	G	G	FL/Y	FL/Y	G	G	G	DW	DW
4 & 8 Change	R	R	FL/R	FL/R	FL/R	FL/R	R	R	Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	DW	DW
PHASE 4 & 8 ALT	R	R	FL/R	FL/R	FL/R	FL/R	R	R	G	G	G	FL/Y	FL/Y	G	G	G	DW	W
PED CLEARANCE	R	R	FL/R	FL/R	FL/R	FL/R	R	R	G	G	G	FL/Y	FL/Y	G	G	G	DW	FL/DW
CHANGE	R	R	FL/R	FL/R	FL/R	FL/R	R	R	Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	DW	DW
Firehouse Pre-Emption Phase 8	R	R	Y	Y	FL/R	FL/R	R	R	R	R	R	R	R	G	G	G	DW	DW
Pre-Emption Clearance	R	R	FL/Y	FL/Y	FL/Y	FL/Y	R	R	R	R	R	R	R	Y	Y	Y	DW	DW
Phase 2 & 6 Normal Operation	G	G	FL/R	FL/R	FL/R	FL/R	G	G	R	R	R	FL/Y	FL/Y	R	R	R	DW	DW
Flashing Operation	FL/Y	FL/Y	DARK	DARK	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	FL/R	FL/R	FL/R	DARK	DARK

## WIRING DIAGRAM



WIRING KEY	
A	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
*	GROUND ROD

SHA# MD409A52/B52 TDD# AT 582-05

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 97 (GEORGIA AVE) AND ARCOLA AVENUE

DRAWN BY: D. DICKERSON	F.A.P. NO.	TS NO. 209 C	SHEET NO. 2 OF 2
CHECKED BY:	S.H.A. NO.		
SCALE: NONE	COUNTY: MONTGOMERY	T.I.M.S. NO. 6530	
DATE: 9/2/04	LOG MILE: 15009702.94		